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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/018,108	08/09/2002	Judith L Klavans	A32550-PCT USA	1477

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EXAMINER

WOZNIAK, JAMES S

ART UNIT	PAPER NUMBER
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2626

DATE MAILED: 06/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/018,108

Applicant(s)

KLAVANS ET AL.

Examiner

James S. Wozniak

Art Unit

2626

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 August 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 August 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. **Claims 1, 3-7, 8, and 10-14** are rejected under 35 U.S.C. 102(e) as being anticipated by Yoshimi et al (*U.S. Patent: 6,374,209*).

With respect to **Claims 1 and 8**, Yoshimi discloses:

A method for determining similarity in short text segments (*sentences, Col. 2, Lines 28-33*) comprising:

Determining common primitive features in the text segments (*important words of sentence, Col. 9, Lines 28-58*);

Determining common composite features in the text segments (*word weighting features, Col. 9, Line 59- Col. 10, Line 63; and Col. 13, Line 49- Col. 14, Line 30*); and

Calculating a similarity measure based upon the primitive and composite features (*relation degree calculation, Col. 9, Line 59- Col. 10, Line 63; Col. 14, Line 31- Col. 15, Line 10; and Col. 16, Lines 50-58*).

Yoshimi further discloses method implementation as a computer program (*Col. 7, Lines 26-28*)

With respect to **Claims 3 and 10**, Yoshimi recites:

The composite features are selected from the group including primitive feature order restrictions (*word positions, Col. 13, Line 66- Col. 14, Line 4*), primitive distance restrictions (*distance, Col. 10, Lines 1-14*), and primitive type restrictions (*part of speech, Col. 13, Lines 54-59*).

With respect to **Claims 4 and 11**, Yoshimi recites:

Identifying common primitive features (*detecting important words, Col. 9, Lines 28-58*);
Assigning a value to the primitive features (*initial important word values, Col. 9, Lines 59-62*); and
Normalizing the value (*weighting an important word, Col. 13, Line 54- Col. 14, Line 30*).

With respect to **Claims 5 and 12**, Yoshimi discloses:

The step of normalizing includes at least one of normalizing for text segment length (*character size, Col. 14, Lines 12-17*) and normalizing for frequency of primitive occurrence (*appearance frequency, Col. 13, Lines 60-65*).

With respect to **Claims 6 and 13**, Yoshimi recites:

Identifying common primitive features (*detecting important words, Col. 9, Lines 28-58*);
Assigning a value to the primitive features (*initial important word values, Col. 9, Lines 59-62*); and
Normalizing the value (*weighting an important word, Col. 13, Line 54- Col. 14, Line 30*).

With respect to **Claims 7 and 14**, Yoshimi discloses:

The step of normalizing includes at least one of normalizing for text segment length (*character size, Col. 14, Lines 12-17*) and normalizing for frequency of primitive occurrence (*appearance frequency, Col. 13, Lines 60-65*).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. **Claims 2, 9, and 15-16** are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshimi et al in view of Kupiec (*U.S. Patent: 5,696,962*).

With respect to **Claim 2 and 9**, Yoshimi teaches the method and system for determining the relationship degree of short text passages, as applied to Claims 1 and 8. Yoshimi further discloses determining primitive features that include common nouns and *verbs* (*Col. 9, Lines 34-58*). Yoshimi does not specifically suggest that the primitive features also include noun phrases, semantic verb classes, and proper nouns, however Kupiec discloses a means for determining text passage similarity utilizing synonyms, verb meaning, and proper nouns (*Col. 22, Line 54- Col. 23, Line 31; and Col. 24, Lines 36-44*).

Yoshimi and Kupiec are analogous art because they are from a similar field of endeavor in natural language text processing. Thus, it would have been obvious to a person of ordinary skill in the art, at the time of invention, to modifying the teachings of Yoshimi with the features

utilized in text passage similarity determination taught by Kupiec in order to provide a means of broadening common word searches to achieve a desired result (*Kupiec, Col. 23, Lines 24-31*).

With respect to **Claim 15**, Yoshimi teaches method implementation as a computer program, as applied to Claims 8-9, while Kupiec discloses determining text passage similarity utilizing synonyms, verb meaning, and proper nouns, as applied to Claim 9.

With respect to **Claim 16**, Kupiec further discloses a machine-training algorithm utilizing a corpus for use in text passage similarity determination (*Col. 30, Lines 11-61*).

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Boguraev (*U.S. Patent: 5,799,268*)- teaches a method for combining associated text into a merged file.

Wical (*U.S. Patent: 5,887,120*)- teaches a method for comparing paragraph vectors in order to determine theme similarities.

Numata (*U.S. Patent: 5,943,669*)- teaches a means for determining a degree of similarity between paragraphs.

Liddy et al (*U.S. Patent: 5,963,940*)- teaches a method for generating similarity scores for logical paragraphs.


McKeown et al (*U.S. Patent: 6,473,730*)- teaches a method for topic segmentation of a text document.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to James S. Wozniak whose telephone number is (571) 272-7632. The examiner can normally be reached on M-Th, 7:30-5:00, F, 7:30-4, Off Alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Hudspeth can be reached at (571) 272-7843. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

James S. Wozniak
6/7/2006



DAVID HUDSPETH
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